
# COVER SHEET

# Profiling drink driving offenders in Central Queensland – Preliminary findings from the evaluation of a drink driving rehabilitation/treatment program.

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## ABSTRACT

Drink driving rehabilitation/treatment programs are widely used intervention strategies in the prevention of recidivist drink driving. Although the effectiveness of rehabilitation programs was not always recognised, recent meta-analytic and evaluation studies provide systematic evidence supporting the utilisation of these measures in the control of drink driving.

The data presented in this paper contributes to the existing body of knowledge examining the utility of rehabilitation programs. It presents the profiles of drink driving offenders who elected to attend the 'Under the Limit' rehabilitation program (Sheehan, Schonfeld, & Davey, 1995) and a control group who elected to remain in the "typical" management procedures. 'Under the Limit' is a behaviour change intervention which aims to reduce recidivism through modification of relevant lifestyle factors. Base line data collected for the evaluation of the program are examined for 148 drink driving offenders who were interviewed at the time of their court appearance. An extensive examination of the characteristics of these offenders will be presented. In addition comparisons will be drawn between the 74 offenders who elected to attend the 'Under the Limit' drink driving program and the remaining 74 offenders who acted as the control group. A range of variables are examined including socioeconomic indicators, knowledge of alcohol and its association with BAC, relevant attitudes, drink driving behaviours, alcohol consumption, self esteem and availability and use of social support. Inferences for the design and implementation of rehabilitation programs will be drawn.

## INTRODUCTION

Drink driving rehabilitation is a broad term used to describe a variety of offender programs which aim to reduce the amount of drink driving in society. These programs are not aimed at preventing drink driving, but rather target convicted offenders with the goal of reducing their potential to recidivate. There are many different types of rehabilitation programs and while much research has been conducted to determine the effectiveness of these programs in reducing recidivism, initial evaluations showed few benefits (Mann, 1995; Victorian Social Development Committee, 1988). More recent evidence, however, suggests that drink driving remediation programs can be effective in offender rehabilitation (see DeYoung, 1997; Wells-Parker, Bangert-Drowns, McMillen, & Williams, 1995). Most notable of all outcomes is the finding that drink driving rehabilitation programs can reduce recidivism by up to 7-9% in addition to the benefits of licence sanctions (Wells-Parker et al., 1995).

Some research has suggested that while reducing recidivism is an important traffic safety outcome, a more holistic approach to the evaluation of drink driving programs is needed (Fitzpatrick, 1992). Few studies have examined the benefits of drink driving rehabilitation programs on lifestyle factors such as alcohol consumption. In light of the social and personal problems that many offenders experience (Hedlund, 1995), measuring changes in lifestyle factors may provide a more sensitive measure of the effectiveness of rehabilitation programs (Hall, 1997).

The purpose of the present paper is to present a profile of drink driving offenders from the Central Queensland region using measures of knowledge, attitudes, and lifestyle change. The paper will describe the characteristics of drink driving offenders and discuss the implications for the development of drink driving rehabilitation programs. Data collected for use in this paper forms part of a larger project examining the effectiveness of a drink driving rehabilitation program.

## METHOD

Face-to-face interviews were used to assess knowledge, attitudes and lifestyle factors among 148 drink driving offenders. Of the 148 offenders interviewed, 74 had been placed on the 'Under the Limit' (UTL) program as a result of their court hearing (UTL group) and the remaining 74 offenders did not undertake the UTL program as part of their sentence (control group). The 'Under the Limit' program is a drink driving rehabilitation program offered through the Queensland court system. Offenders can elect to pay a course fee and undertake the program as part of their sentence and those offenders who do generally have their fine waived or reduced.

Offender interviews were conducted in a sample of Central Queensland courts (Rockhampton, Gladstone and Yeppoon) between January and September 1997. The timing of offender interviews was scheduled around the offender's court appearance. Due to the nature of the legal system, some interviews were conducted prior to and some interviews were conducted immediately after the offender's court hearing. Offenders were sequentially recruited until the target sample size for each group was obtained (75 offenders in the UTL group and 75 offenders in the control group[1]).

The interview schedule used in this study was designed to include measures identified in the literature as potentially contributing to recidivism. Many of the measures and scales used in the interview schedule were selected from a wide range of possible scales most of which had never been used on a sample of drink driving offenders. The interview schedule included the following types of questions:

- Socio-demographics
- Court hearing results
- Knowledge of alcohol and legal blood alcohol concentrations (BACs)
- Attitudes toward drink driving

[1] The sample originally consisted of 150 drink driving offenders. Two offenders were removed from the study as one offender had previously completed the UTL course and the other was a juvenile offender.

- Self-reported behaviours and behavioural intentions
- Availability of social support
- Measure of alcohol problems

## RESULTS AND DISCUSSION

### *Socio-demographics*

Table 1 shows the socio-demographic characteristics of the offenders who participated in this study. Offenders were mostly male (79.7%) and single (60.8%), with few of Aboriginal or Torres Strait Islander background (10.8%). The sample was young with 68.3% being 34 years or younger. The mean age for the total sample was 30.9 years (SD = 11.1 years).

**Table 1**

Socio-demographic characteristics of the UTL (N=74) and control (N=74) groups and the total offender sample (N = 148)

| | UTL Group (%) | Control Group (%) | Total Sample (%) |
|---|---|---|---|
| Age Group: | | | |
| <24 years | 35.1 | 37.8 | 36.5 |
| 25-34 years | 36.5 | 27.0 | 31.8 |
| 35-44 years | 16.2 | 21.6 | 18.9 |
| 45-54 years | 9.5 | 9.5 | 9.5 |
| 55+ years | 2.7 | 4.1 | 3.4 |
| Marital Status: | | | |
| Single | 56.8 | 64.9 | 60.8 |
| Married | 13.5 | 14.9 | 14.2 |
| De facto | 21.6 | 6.8 | 14.2 |
| Divorced | 2.7 | 5.4 | 4.1 |
| Widowed | -- | 1.4 | 0.7 |
| Separated | 5.4 | 6.8 | 6.1 |
| Education Level[a]: | | | |
| Primary | 13.5 | 14.9 | 14.3 |
| Junior | 52.7 | 50.0 | 51.0 |
| Senior | 21.6 | 16.2 | 19.0 |
| TAFE/Tech/App | 9.5 | 13.5 | 11.6 |
| CAE/Uni | 2.7 | 4.1 | 3.4 |
| Other | -- | 1.4 | 0.7 |
| Income | | | |
| $20,000 or less | 68.9 | 58.1 | 63.5 |
| $20,001-$35,000 | 18.9 | 31.1 | 25.0 |
| $35,001-$50,000 | 8.1 | 6.8 | 7.4 |
| $50,001-$70,000 | 2.7 | 2.7 | 2.7 |
| Don't know | 1.4 | 1.4 | 1.4 |
| Employment Status | | | |
| Full-time | 32.9 | 47.3 | 40.1 |
| Part-time | 5.8 | 4.1 | 4.8 |
| Casual | 12.3 | 13.5 | 12.9 |
| No job | 49.3 | 35.1 | 42.2 |

[a] Control Group N = 73, Total Sample N = 147

The majority of offenders were educated to a Junior (Year 10) standard. Approximately 64% of offenders had an annual income of $20,000 or less. Of that 64%, over half (53.2%) were

unemployed *and* receiving a government pension. The median income category for those offenders who were employed at the time of the first interview (N=86) was '$20,001 to $35,000', while for those offenders who were unemployed (N=62) the median income category was '$20,000 or less'.

Approximately half (49.3%) of the UTL group were unemployed at the time of the interview, compared with just over one-third (35.1%) of the control group. Of those offenders employed at the time of their first interview (N=86), 68.6% were employed in full-time work and 61.6% were employed in the trades or labouring fields. Almost half (47.6%) the offenders were receiving some form of government assistance or pension at the time of the interview. Males most commonly received Newstart or Jobsearch allowances (60.8%), while females tended to receive Sole Parent or Parenting Pensions (47.3%).

The socio-demographic characteristics of the offender sample reflect the findings of similar studies examining the characteristics of drink driving offenders in other jurisdictions. These studies suggest that the predictors of drink driving and drink driving recidivism include: male, young age (18-24 years), single or divorced, low education level, and blue collar occupation (Hedlund, 1995; Macdonald & Dooley, 1993; Nickel, 1990).

***Hearing Outcomes***

BACs for the drink driving offence were examined and a significant difference was found between the UTL and control groups ($t(143) = -4.37$, $p < .001$). Table 2 shows the mean BAC reading for each group. The UTL group had higher BAC readings with 45.9% of offenders having a BAC greater than 0.15gm/100ml, compared to only 24.7% of the control group. Table 2 also shows that offenders in the UTL group received a longer licence disqualification period ($t(145) = -5.53$, $p < .001$) and were less likely to receive a restricted licence ($\chi^2(1) = 4.24$, $p < .04$). Length of licence disqualification was correlated with BAC and found to be significant ($r(144) = .72$, $p < .001$). The results suggest that offenders in the UTL group tended to receive harsher penalties and this appears to reflect the severity of the offence (as measured by BAC reading). The results also suggest that those offenders who have a high-range BAC offence and are therefore more likely to receive harsher penalties, are more likely to self-select to attend the UTL program possibly reflecting the reduced or waived fine they would receive.

**Table 2**
Hearing outcomes for the drink driving offence for offenders in the UTL (N=72) and control (N=73) groups

| Hearing Outcome | UTL Group | Control Group |
|---|---|---|
| Mean BAC reading | 0.150 (SD = 0.047) | 0.116 (SD = 0.047) |
| BAC category (%) | | |
| Less than .050 | -- | 4.1 |
| .050 - .099 | 11.1 | 37.0 |
| .100 - .149 | 43.1 | 34.2 |
| .150 - .199 | 29.2 | 19.2 |
| .200 + | 16.7 | 5.5 |
| Licence sanctions | | |
| Restricted licence | 4.1 | 13.7 |
| Disqualification length (Mean) | 11.3 mths (SD = 6.1 mths) | 6.1 mths (SD = 5.2 mths) |

The number of other offences heard on the day of the drink driving offence was also recorded. Forty-three percent of the UTL group and 13.5% of the control group were appearing before court for offences in addition to the drink driving offence. This difference was significant ($\chi^2(1) = 14.88$, $p < .001$). Table 3 shows the types of additional offences reported by all offenders. Offenders were most likely to be appearing in court for an unlicensed or disqualified driving charge. Almost one-fifth (17.5%) of the additional offences heard in court were a second drink driving offence.

**Table 3**
Types of offences other than the drink driving offence heard in court

| Offence | Percent[a] |
|---|---|
| Unlicensed / disqualified driving | 40.4 |
| Drink driving | 17.5 |
| Disobeying road rules | 14.0 |
| Obstructing / not cooperating with police | 7.0 |
| Unlawful use of a motor vehicle | 5.3 |
| Fail to comply with licence requirements | 3.5 |
| Dangerous driving / driving without due care and attention | 3.5 |
| Other offences | 8.8 |

[a] Values were calculated as a percentage of the total number of other offences heard (N=57).

***Knowledge of Alcohol***
Offenders' knowledge of alcohol was assessed through a series of questions examining safe consumption levels for driving and legal BAC limits. The results of these questions are

presented in Table 4. Offenders in the UTL group were more likely to correctly identify safe consumption levels for 'an adult man' and 'a provisional driver', while no difference was found between the two groups for 'an adult woman'. Table 4 also shows the percent of offenders who correctly identified legal BAC limits. In general, offenders appear to have greater knowledge of the legal BAC for open licensed drivers than they do for provisional drivers. Offenders also appear to have more accurate knowledge of legal BACs than knowledge of safe alcohol consumption levels for driving.

**Table 4**
Percent of offenders correctly identifying safe drinking levels and legal BAC limits for various classes of drivers

| | UTL Group (%) | Control Group (%) | Group Difference |
|---|---|---|---|
| Safe drinking levels[a] for: | | | |
| Adult man (2 drinks) | 50.0 | 27.0 | $P^2(1) = 8.25^{**}$ |
| Adult woman (1 drink) | 44.6 | 32.4 | $P^2(1) = 2.31$ |
| Provisional driver (0 drinks) | 81.1 | 63.5 | $P^2(1) = 5.70^{*}$ |
| Legal BAC limit[a] for: | | | $P^2(1) = 2.46$ |
| Open driver (0.05) | 95.9 | 89.2 | $P^2(1) = 0.15$ |
| Provisional driver (0.00) | 77.0 | 74.3 | |

[a] Correct responses for safe drinking levels are presented in brackets
$^{*}$ $p < .02$; $^{**}$ $p < .005$

***Attitudes toward drink driving***
Offenders were asked a series of questions examining their attitudes toward drink driving using a 10-point scale ('1' = Strongly Disagree and '10' = Strongly Agree). Table 5 shows the percent agreement (ie percent of offenders giving a score of 6 or more), mean, and standard deviation for each of the attitudinal questions. In general, offenders' attitudes on a range of drink driving issues were in the desired direction. For a comparison between the offender sample and a matched community sample on these attitudes, see the paper by Baum and Sheehan ("Drink driving as a social problem: Comparing the attitudes and knowledge of drink driving offenders and the general community").

**Table 5**
Percent agreement, means, and standard deviations for the attitudinal questions (N = 148)

| | Agreement (%) | Mean | SD |
|---|---|---|---|
| There is no excuse for driving while drunk. | 88.5 | 8.86 | 2.32 |
| People who drink and drive should lose their driver's licence. | 78.4 | 8.04 | 2.51 |
| Everybody drinks and drives once in a while. | 77.7 | 7.68 | 2.56 |
| If I drive when I'm over the limit, I will get picked up for a breath test. | 77.0[a] | 8.31 | 2.47 |
| My friends would think I was really stupid if I drove after drinking. | 70.9 | 7.62 | 2.84 |
| I think it's okay if I drive after drinking X drinks in one hour. | 50.0 | 5.64 | 3.85 |
| I won't drive if I've had X drinks in one hour. | 49.3 | 5.66 | 3.77 |
| Drinking and driving is common in my community. | 44.6 | 5.37 | 3.17 |
| My community needs stricter laws against drunk driving. | 35.8[a] | 5.01 | 3.16 |
| It's okay to drive after drinking so long as you're not drunk[c]. | 33.3[b] | 4.31 | 3.17 |
| The dangers of drinking and driving are overrated. | 31.1 | 3.95 | 3.52 |
| The police spend too much time hassling drinking drivers. | 25.7[b] | 3.66 | 3.06 |
| Most of my friends think it's okay to drink and drive. | 24.3 | 3.91 | 2.70 |
| Some people drive better after drinking. | 14.9 | 2.47 | 2.55 |
| It's okay to drink and drive so long as you don't get caught. | 13.5 | 2.47 | 2.60 |
| People who drink and drive should go to jail. | 10.1 | 3.02 | 2.36 |

[a] Females were significantly more likely to agree with this statement.

[b] Females were significantly more likely to disagree with this statement.

[c] N = 147

***Self-reported behaviours and behavioural intentions***

Offenders were asked how often in the last 6 months they would have drunk a glass or more of an alcoholic drink. All offenders reported drinking alcohol within the last 6 months, with responses ranging from 'a few times' to 'everyday of the week'. The median level of alcohol consumption was '2-3 times a week' with almost three-quarters of the sample drinking alcohol on at least a weekly basis.

Alcohol consumption over a weekend period was assessed by asking offenders how many alcoholic drinks they consumed last Friday, last Saturday, and last Sunday. Table 6 shows consumption levels for these three days. The distributions for both Friday and Saturday appear U-shaped with many offenders drinking no alcohol and many offenders drinking more than 10 drinks. The distribution of scores for 'last Sunday' is skewed. The median consumption level for both Friday and Saturday was '3-4 drinks', while on Sunday it was 'no drinks'. Alcohol consumption levels appear higher on Friday than any other weekend day with over 40% of offenders drinking 7 or more drinks.

**Table 6**
Alcohol consumption levels over a weekend period

| | Friday (%) | Saturday (%) | Sunday (%) |
|---|---|---|---|
| None | 37.2 | 42.2 | 65.3 |
| 1-2 drinks | 5.4 | 7.5 | 11.6 |
| 3-4 drinks | 8.1 | 8.8 | 4.8 |
| 5-6 drinks | 8.1 | 6.8 | 4.8 |
| 7-9 drinks | 6.8 | 6.8 | 2.0 |
| 10 or more drinks | 34.5 | 27.9 | 11.6 |

Offenders were also asked how often in the last 6 months they had driven on a public road after drinking enough alcohol to place them over the limit. Forty-eight percent of offenders indicated that they had driven only once in the last 6 months when they believed their BAC was over the legal limit, while 39.1% indicated they had driven more than once in the last 6 months when they believed their BAC was over the legal limit. The remaining offenders said they had not driven while over the limit in the last 6 months (6.1%) or that they did not know how many times they had driven while over the legal limit in the last 6 months (6.8%).

A one-way Analysis of Variance was performed to determine the relationship between self-reported drink driving in the last 6 months and self-reported level of alcohol consumption in the last 6 months. Frequency of drink driving in the last 6 months was found to differ across alcohol consumption groups ($F(5,132) = 3.11$, $p < .02$), with offenders who consume alcohol regularly (ie 4-5 times a week or more) having the highest frequency of drink driving. Table 7 shows the average number of times offenders in each alcohol consumption group had driven on a public road after drinking in the last 6 months.

Offenders were also asked a series of questions examining the behaviours they would change in order to avoid drink driving in the future. These questions are presented in Table 8. A Principal Components Analysis was performed on these behavioural intentions questions and a 2-factor solution after varimax rotation emerged (explained variance = 58.8%). Table 8 shows the variable loadings for each factor. Factor 1 represents changes to *driving behaviours*, while factor 2 represents changes to *drinking behaviours*. The reliability

(Cronbach's alpha) of the *driving behaviours* factor was 0.81 and the reliability of the *drinking behaviours* factor was 0.57.

**Table 7**
Average number of times driven after drinking by rate of alcohol consumption

| Rate of alcohol consumption in the last 6 months | Average number of times driven after drinking in the last 6 months | |
|---|---|---|
| | N | Mean |
| A few times | 21 | 1.4 |
| Once every 4 weeks | 16 | 1.1 |
| Once a week | 29 | 3.1 |
| 2-3 times a week | 42 | 3.9 |
| 4-5 times a week | 16 | 10.3 |
| Everyday | 14 | 11.3 |

**Table 8**
Variable loadings for the principal components analysis of the behavioural intentions questions

| | Factor 1 | Factor 2 |
|---|---|---|
| Take a taxi by yourself or with others if you have been drinking | 0.79 | |
| Plan ahead that the driver will not drink | 0.83 | |
| Plan ahead not to drink if you are going to drive | 0.82 | |
| Stay away overnight if you have been drinking | 0.56 | |
| Leave locked car where it was and not drive | 0.66 | |
| Keep track of your drinks and stay under the limit if you are driving | | 0.72 |
| Avoid being involved in 'shouts' to make sure you drink less | | 0.51 |
| Drink lite beer if driving | | 0.82 |

Factor scores were computed for each offender for both the *drinking behaviours* factor and the *driving behaviours* factor. Offenders' scores on the *drinking behaviours* factor ranged from 3 to 15, with scores being spread throughout the entire range available (Mean = 7.85; SD = 3.24; based on the summation of 3 variables). Offenders' scores on the *driving behaviours* factor ranged from 5 to 22 out of a possible range of 5 to 25 (Mean = 8.18; SD = 3.43; based on the summation of 5 variables). A low score on each factor indicates a greater willingness to change those behaviours. Differences between the UTL and control groups for each factor were examined and no differences were found between the two groups for either factor.

After controlling for the number of items that make up each factor, a Paired Samples *t*-Test was conducted to determine if the difference in means between the *driving behaviours* factor and the *drinking behaviours* factor was significant (ie to determine if offenders were more likely to prefer changing one type of behaviour over the other). The results of the *t*-Test were significant ($t(147) = -12.45$, $p < .001$), suggesting that offenders in this sample were more likely to consider changing their driving behaviours (as opposed to their drinking habits) to avoid drink driving in the future.

***Mental Health and Availability of Social Support***

The Mental Health Inventory (Ware, Gandek, & the IQOLA Project Group, 1994) was used to determine the level of subjective mental health or psychological well-being experienced by offenders over the month prior to the interview. Results indicate that the offender sample was experiencing a high level of mental health as 81.1% of the sample had a score of 10 or less (on a scale of 0 to 20 where a high score equals poor mental health).

The level of social support available to the offender sample was assessed through the Social Support Appraisals Scale which examines the level of support from family, friends and others (Vaux, 1988), and two subscales of the Interpersonal Support Evaluation List – Self-esteem Support and Tangible Support (Cohen, Mermelstein, Kamarck, and Hoberman, 1985). In general, offenders scored high on all scales and subscales, with support from family being higher than support from friends and others ($F(2,145) = 26.81$, $p < .001$). This finding appears to reflect the immediacy of relationships with offenders, with familial relationships being more immediate and closer than relationships with friends and others.

***Measure of Alcohol Problems and Readiness to Change***

The Alcohol Use Disorders Identification Test (AUDIT; Saunders, Aasland, Babor, de la Fuente, & Grant, 1993) was used to assess the degree of alcohol problems in the offender sample. Scores on the AUDIT ranged from 2 to 34 out of a possible range of 0 to 40. Differences between the UTL and control groups were assessed and a significant difference was found ($t(145) = -2.25$, $p < .03$). The mean AUDIT score for the UTL group was 13.5 (SD = 6.2), while for the control group it was 11.2 (SD = 5.9), indicating that the UTL group was consuming alcohol at a more harmful level.

AUDIT scores for the UTL and control groups were recoded into one of three levels of alcohol problems. Table 9 shows the percent of offenders in each risk group. Offenders in the UTL group were more likely than the control group to be alcohol dependent. Almost 80% of the total sample (80.5% males and 75.9% females) were consuming alcohol at a rate consistent with a moderate-to-high risk of alcohol problems (ie harmful consumption or alcohol dependent). Regional data on alcohol consumption rates show that only 30.7% males and 8.1% females from the general population are at moderate-to-high risk of alcohol problems (Davey, 1995), suggesting that the risk of alcohol problems within the offender sample is much higher than the regional population.

**Table 9**

Distribution of offenders across three levels of risk of alcohol problems

| | UTL Group (%) | Control Group (%) |
|---|---|---|
| No harmful consumption | 12.2 | 28.8 |
| Harmful consumption | 36.5 | 38.4 |
| Alcohol dependent | 51.4 | 32.9 |

Given the high level of alcohol problems in the offender sample, the Readiness to Change Scale (Heather & Rollnick, 1993) was used to assess offenders' position or readiness to change their drinking habits. No difference was found between the UTL and control groups for this measure ($P^2(2) = 5.55$, $p > .06$). The spread of scores for all offenders across the three stages of change was fairly even, with 37.8% of offenders being in the Precontemplation stage of change, 26.4% being in the Contemplation stage of change, and 35.8% being in the Action stage of change. Results indicate that the number of offenders who were in the process of changing their drinking habits (action stage) is similar to the number of offenders who were denying a problem exists (precontemplation stage).

The relationship between the Readiness to Change Scale and the AUDIT was examined and a significant result emerged ($F(2,144) = 13.68$, $p < .001$). Table 10 shows the distribution of offenders across AUDIT risk groups for each stage of change. As can be seen from this table, offenders classified into the precontemplation stage of change had the highest risk of developing alcohol problems. These findings do not reflect those of Wells-Parker, Williams, Dill, and Kenne (1998), which suggest that offenders in the precontemplation stage of change are *least* likely to be alcohol dependent compared to offenders in the other change groups. Overall, it appears that with increasing awareness of their drinking problem, there is a decreasing risk of alcohol problems among offenders in this study.

Comparison between the Readiness to Change scale and the AUDIT also showed that offenders classified as alcohol dependent by the AUDIT were more likely than the other AUDIT risk groups to be in the precontemplation stage of change. Approximately 53% of 'alcohol dependent' offenders were in the Precontemplation stage of change compared to only 13.3% of the 'no harmful consumption' group and 32.7% of the 'harmful consumption' group. That is, many of the offenders most at risk of alcohol problems and possibly drink driving recidivism do not recognise that they have a drinking problem.

**Table 10**

Distribution of offenders across AUDIT risk categories for each stage of the readiness to change scale

| Audit Risk Category | Readiness to Change Stage | | |
|---|---|---|---|
| | Precontemplation[a] | Contemplation[b] | Action[c] |

| | | | |
|---|---|---|---|
| No harmful Consumption | 7.3 | 38.5 | 20.8 |
| Harmful Consumption | 32.7 | 41.0 | 39.6 |
| Alcohol Dependent | 60.0 | 20.5 | 39.6 |
| Median level of risk | Alcohol dependent | Harmful consumption | Harmful consumption |

[a] N = 55; [b] N = 39; [c] N = 53

## CONCLUDING REMARKS

This study has found that drink driving offenders from the Central Queensland region have similar socio-demographic characteristics to offenders from other jurisdictions/countries. However, a number of implications emerge from the study for the development of drink driving rehabilitation programs.

1. When drink driving rehabilitation programs are not court mandated, offenders will self-select to attend the rehabilitation program resulting in significant differences between those who attend the program and those who do not. Differences between the UTL and control groups in this instance included the severity of the drink driving offence and the penalties received, the number of other offences heard on the day of the drink driving charge, the level of alcohol problems experienced, and knowledge of safe consumption levels for driving.

2. Self-selection onto rehabilitation programs may not result from an offender's desire to rehabilitate. In this paper, it appears that the reduced or waived fine offenders were to receive for undertaking the 'Under the Limit' program acted as an incentive, given the severe penalties they were likely to receive for their high-range BAC offences. Offenders did not appear to undertake the 'Under the Limit' program due to a desire to rehabilitate, as many offenders did not recognise their drinking problem.

3. The level of alcohol consumption and the risk of alcohol problems among offenders is high. Compared to a population sample, offenders were more likely to report a moderate-to-high risk of alcohol problems. Many offenders were also not aware of their drinking problem and were therefore not taking action to change it. This indicates that drink driving rehabilitation programs need to include a focus on awareness of alcohol consumption, the problems associated with high alcohol consumption, and strategies to help reduce high alcohol consumption.

4. Offenders appear to have poor knowledge of alcohol and its affects on driving. Knowledge should be included in rehabilitation programs by providing offenders with information about safe consumption levels for driving.

5. Offenders appear to be more willing to change their driving behaviours than their drinking behaviours in order to avoid drink driving in the future. Rehabilitation programs should capitalise on offenders' willingness to change these behaviours. Programs should provide offenders with opportunities to identify ways in which they can change their driving behaviours in their own personal context. It is essential that offenders recognise that changing driving behaviours *is* a real option to avoid future drink driving.

**REFERENCES**


Cohen, S., Mermelstein, R., Kamarck, R., & Hoberman, H. (1985). Measuring the functional components of social support. In I.G. Sarason and B.R. Sarason (Eds.), **Social support: Theory, research and application.** The Hague, Holland: Martinus Nijhoff.

Davey, J. (1995). **Background research report for the Queensland drug offensive strategy adult alcohol campaign – Section E: Regional alcohol consumption profiles.** Report for Queensland Health. Brisbane, Australia: Department of Social and Preventive Medicine, University of Queensland.

DeYoung, D.J. (1997). An evaluation of the effectiveness of alcohol treatment, driver license actions and jail terms in reducing drunk driving recidivism in California. **Addiction, 92**(8), 989-997.

Fitzpatrick, J.L. (1992). Problems in the evaluation of treatment programs for drunk drivers: Goals and outcomes. **Journal of Drug Issues, 22**(1), 155-167.

Hall, W. (1997). The role of legal coercion in the treatment of offenders with alcohol and heroin problems. **The Australian and New Zealand Journal of Criminology, 30**(2), 103-120.

Heather, N. & Rollnick, S. (1993). **Readiness to change questionnaire: User's manual – revised version** (Technical Report No. 19). Sydney, Australia: National Drug and Alcohol Research Centre.

Hedlund, J. (1995). Who is the persistent drinking driver? Part I: USA. **Transportation Research Circular, 437**, 16-20.

Macdonald, S., & Dooley, S. (1993). A case-control study of driving-while-impaired offenders. **Drug and Alcohol Dependence, 33**(1), 61-71.

Mann, R.E. (1995). Settling old questions, stimulating new ones. **Addiction, 90**(12), 1587-1589.

Nickel, W.R. (1990). A five-year follow-up of treatment for DWI recidivists in the Federal Republic of Germany. **Alcohol, Drugs and Driving, 6**(3-4), 119-132.

Saunders, J.B., Aasland, O.G., Babor, T.F., de la Fuente, J.R., & Grant, M. (1993). Development of the alcohol use disorders identification test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption – II. **Addiction, 88**, 791-804.

Sheehan, M., Schonfeld, C., & Davey, J. (1995). **A community based prevention/ rehabilitation programme for drink drivers in a rural region: "Under the limit"** (FORS Monograph CR 156). Canberra, Australia: Federal Office of Road Safety.

Vaux, A (1988). **Social support: Theory, research, and intervention.** NY: Praeger.

Victorian Social Development Committee. (1988). **Drink-driver education and treatment: Second and final report upon the inquiry into the management of drink-drivers apprehended with high blood alcohol levels.** Melbourne, Australia: Parliament of Victoria.

Wells-Parker, E., Bangert-Drowns, R., McMillen, R., & Williams, M. (1995). Final results from a meta-analysis of remedial interventions with drink/drive offenders. **Addiction, 90**, 907-926.

Wells-Parker, E., Williams, M., Dill, P., & Kenne, D. (1998). Stages of change and self-efficacy for controlling drinking and driving: A psychometric analysis. **Addictive Behaviours, 23**(3), 351-363.

Ware, J.E., Gandek, B., & The IQOLA Project Group. (1994). The SF-36 health survey: Development and use in mental health research and the IQOLA project. **International Journal of Mental Health, 23**(2), 49-73.